

Demand Management Measures

Independent Technical Panel

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City of Santa Monica
Russell Ackerman

City of Santa Monica

- City of Santa Monica – 92,000 residents, 7,000 businesses, and 200,000 day-time visitors
- A sustainable city striving for water self-sufficiency by 2020
- Russell Ackerman is a Sustainability Analyst for the Office of Sustainability and the Environment who performs landscape and irrigation plan checks and inspections, trains landscapes professionals and property owners, and develops policy related to water conservation and sustainable landscaping

Santa Monica's approach to sustainable landscaping

- Began promoting sustainable landscaping in 1990
- Research through hands-on experience – demo gardens, case studies, pilot projects
- Local ordinance that codifies landscape and irrigation best management practices
- Education by partnering with local landscape professionals, manufacturers, irrigation supply stores, nurseries, and Santa Monica College

BEFORE



AFTER

- Non-fruiting Olive trees
- Use of mulch
- Drip Irrigation
- Good scale – nothing overgrown



- Rainwater Harvesting



BEFORE



- Minimal maintenance
- Good scale
- Drip irrigation
- Permeable paving
- Fountain for wildlife



BEFORE



AFTER



- Permeable paving in parkway and driveway
- Sycamore – good shade
- Dry creek beds
- Good scale
- Yarrow lawn alternative in parkway



- Slope Saver as turf alternative
- Smart irrigation controller

Sustainable Landscaping Examples

Before



After



Sustainable Landscaping Outreach

- Since 1990 Santa Monica has held hundreds of free classes for landscape professionals and property owners on topics such as soil water relationship, drip irrigation, climate-appropriate plants, weather-based irrigation controllers, composting, alternate water supplies, and integrated pest management.
- Sustainable Landscape Professional Program is a certification program for landscape architects and contractors to receive specialized training and benefits.

Sustainable Landscaping Results

- garden\garden demonstration project over nine years showed sustainable landscapes save **83% water**, **68% maintenance hours**, **56% green waste** compared to lawns and sprinklers.

**Native
Garden**



**Traditional
Garden**



Current challenges to achieve conservation goals and objectives –internal to Santa Monica

- Landscaping and irrigation is not considered as vital to health and safety compared to indoor plumbing
- Plan checkers and inspectors lack of knowledge and experience with sustainable landscaping
- Many hours spent reviewing and correcting plan sets because the plans submitted do not meet the basic code requirements

Current challenges to achieve conservation goals and objectives- external to Santa Monica

- Education and Experience: design, install, maintain
 - Landscapers (architects, landscape architects, contractors, landscape contractors, gardeners)
 - Retail/Irrigation Supply Store Staff
 - Manufacturers
 - Nurseries
 - Property Owners
- Regulation and Enforcement: permits, plan check, inspections
 - Landscapers (architects, landscape architects, contractors, landscape contractors, gardeners)
- Products: sprinklers, high water use plants
 - Manufacturers
 - Nurseries

Anticipated challenges to achieve conservation goals and objectives

- Internal to Santa Monica
 - Knowledgeable staff
- External to Santa Monica
 - Lack of leadership and cooperation amongst landscapers to inform, educate, and assist professional landscapers regarding sustainable landscaping best management practices and complying with state and local laws

Conservation practices recommendations to the ITP

- Consider requiring education and continuing education for licensure – architects and contractors (every kind)
- Consider working with manufacturers to educate professionals and property owners about their best water saving products
- Consider requiring landscape/irrigation permits, plan check, and inspections
- Consider banning water wasting products such as sprinklers and high water use plants (why are we doing turf removal if we allow it to be installed somewhere else)
- Consider promoting the New Normal state-wide